

REMARKS

Applicant appreciates the consideration shown by the U.S. Patent Office, as evidenced by the December 27, 2006 Office Action. In that Office Action, out of claims 1-35, claims 1-35, were rejected. As such, claims 35 remain in the case, with amendments to claims 9, 21, 22, 25, 26, and 31.

The October 30th, 2006 Office Action has been carefully considered. Applicant respectfully requests reconsideration of the application by the Examiner in light of the above amendments and the following remarks in response to the October 30th, 2006 Office Action.

Objections

The Office Action objected to Claim 9 for alleged improper use of the English language. Claim 9 as submitted reads "The system of claim 1 further comprising: a pressure control system coupled to the platform and the catalyst reservoir for controlling pressure with in the catalyst reservoir" (emphasis added). Per Examiner's helpful suggestion, Applicant has amended the claim 9 to state "The system of claim 1 further comprising: a pressure control system coupled to the platform and the catalyst reservoir for controlling pressure within the catalyst reservoir." Support for the amendment may be found in the specification as filed, such as but not limited to paragraph [0035].

The Office Action objected to Claims 26, 27, and 31 for alleged inconsistent use of claim terminology. Claim 26 recites the limitations "hard piped catalytic injection systems" and "mobile catalyst injection." Claim 27, which depends from claim 26, recites the limitation "mobile catalyst injection *system*" while claim 31 (also dependent from claim 26) recites only "injection system." All of these claims refer to two distinct injection systems, i.e. (1) a "hard piped catalyst injection system," and (2) a "mobile catalyst injection system." Per Examiner's helpful suggestion, Applicant has amended claims 26 and 31 to read "mobile catalyst injection system" which is consistent with the limitation recited in claim 27. Support for the amendment may be found in the specification as filed, such as but not limited to paragraphs 13, 15, 16, 44, and 46-47.

The Office Action objected to Claims 21, 22, and 25 for lack of antecedent basis. Claim 21 recites the limitation "the platform." Per Examiner's helpful suggestion, Applicant intended "platform" to read "trailer" as in independent claim 18. Consequently, claim 21 as amended reads "a second catalyst reservoir coupled to the trailer and pressure control system." Support for the amendment may be found in the specification as filed, such as but not limited to paragraph [0009].

Claim 22 recites the limitation "the trailer" in line 5 of the claim. The Office Action objected for insufficient antecedent basis for this limitation. Per Examiner's helpful suggestion, Applicant has amended claim 22 to recite "a pressure control system coupled to the container and catalyst reservoir." Support for the amendment may be found in the specification as filed, such as but not limited to paragraphs [0009] and [0029].

Claim 25 recites the limitation "the platform." There is insufficient antecedent basis for the limitation in the claim. Per Examiner's helpful suggestion, Applicant has amended claim 25 to recite "a second catalyst reservoir coupled to the container and pressure control system." Support for the amendment may be found in the specification as filed, such as but not limited to paragraphs [0009] and [0029].

Applicant has amended claims 9, 21, 22, 25, 26, and 31 to facilitate prosecution of the application; the amendments do not include new matter and are not related to patentability, but corrects a typographical omission. None of the aforementioned amendments were made to overcome prior art.

NOVELTY

The claims are not anticipated because the cited references fail to disclose a catalyst injection system that is mobile and comprises a transportable platform.

Novelty over Andon

The Office Action rejected Claims 1-4, 9, 18, and 22 under 35 U.S.C. §102(b) as allegedly anticipated by Andon (US 4082513).

Regarding independent claim 1, the Office Action mistakenly alleges that Andon discloses "a mobile catalyst injection system comprising: **a transportable platform** (column 2, lines 11-12), a catalyst reservoir coupled to the platform (10) and adapted to

be coupled to a fluid catalyst cracking unit (14), and a flow control device coupled to an outlet of the reservoir (15) and adapted to control the flow of catalyst through the outlet port. Regarding claim 2, the Office Action alleges Andon discloses wherein the platform is a trailer (column 2, lines 11-12). Regarding claim 4, the Office Action alleges Andon discloses wherein the platform is a railroad car (column 2, lines 1-12). Regarding claim 9, the Office Action alleges Andon discloses a pressure control system (column 2, lines 51-56) coupled to the platform (column 2, lines 11-12) and the catalyst reservoir (10) for controlling pressure within the catalyst reservoir.

However, the Examiner *incorrectly* cites Andon as disclosing mobile catalyst injection system comprising a transportable platform. Andon expressly discloses a catalyst storage tank that is just capable of **'receiving catalyst'** from trucks or cars and fails to disclose a catalyst injection system that itself is mobile and comprises a transportable platform. Andon specifically teaches:

"The catalyst storage tank 10 has a bulk fill line 11 fitted with a valve 28 for **receiving catalyst from tank trucks or tank cars, a vent line 2 fitted with an automatic valve 13**, and a catalyst discharge line 14 fitted with automatic valve 15.
(Col 2. lines 10-12)

Thus, Andon only discloses a catalyst storage tank capable of **'receiving catalyst'** from trucks or cars and fails to disclose a catalyst injection system that is mobile and has a transportable platform .

In order to anticipate under §102, a reference must teach *every aspect* of the claimed invention. In this case, Andon fails to disclose a catalyst injection system that is mobile and has a transportable platform. Consequently, Applicant respectfully submits that independent claims 1, 18, and 22 are not anticipated because the Office Action fails to teach *every aspect* of independent claim 1. Applicant respectfully submits that as current independent claims are not anticipated, the claims which depend from the independent claims are also not anticipated.

NONOBVIOUSNESS

The claims are not obvious because the cited references, either individually or in combination, fail to disclose a catalyst injection system that is mobile and or comprises a transportable platform

Nonobviousness over Andon

The Office Action rejected dependent Claims 5 and 6 under 35 U.S.C. 103 (a) allegedly unpatentable over Andon (U.S. 4,082,513). Regarding claim 5, the Office Action mistakenly alleges that Andon discloses a mobile catalyst injection system comprising: a transportable platform (column 2, lines 11-12), a catalyst reservoir coupled to the platform (10) and adapted to be coupled to a fluid catalyst cracking unit (14), and a flow control device coupled to an outlet of the reservoir (15) and adapted to control the flow of catalyst through the outlet port. Although the Office Action even admits that **Andon fails to disclose wherein the platform is a pallet** (Page 7 paragraph 20), the Office Action nonetheless alleges that, a barge is known in the art to be a substitute means for transporting material. Thus, it would have allegedly been obvious to the person having ordinary skill in the art at the time the invention was made to use a pallet or barge as a "transportable platform" in a mobile catalyst injection system.

As discussed above, Andon expressly discloses a catalyst storage tank that is just capable of **'receiving catalyst'** from trucks or cars and fails to disclose a catalyst injection system that is mobile and comprises a transportable platform.

To establish a prima facie case of obviousness, the MPEP explicitly *requires* the Examiner to demonstrate all the following three criteria. First, there *must* be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine to the reference teachings. Second, there *must* be a reasonable expectation of success. Finally, the prior art reference (or references when combined) *must* teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 -§ 2143.03 .

The test for non-obviousness is not whether it would be merely advantageous or possible to combine references but whether the prior art suggests the motivation to combine the references. "[T]he mere fact that the references can be combined or modified does not make the resultant combination obvious unless the prior art suggests the desirability of the combination". In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990); See MPEP section 2143.01. In this case, the issue is not whether Andon reference may merely be modified; but whether Andon provides any suggestion or motivation to modify and a reasonable expectation of success in disclosing a catalyst injection system that is mobile and comprises a transportable platform.

"The initial *burden is on the examiner* to provide some suggestion or motivation to modify" and a reasonable expectation of success. Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985); See MPEP § 2144 -§ 2144. The teaching or suggestion to make the modification and the reasonable expectation of success must both be found in the reference. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 -§ 2143.03. When the motivation to modify the teachings of the reference is not immediately apparent, it is the duty of the examiner to explain why the modification of the teaching is proper.

In this case, Applicant respectfully submits that independent claims 1, 18, 22, and the all the claims dependent thereon, are not obvious because the Office Action fails to demonstrate a catalyst injection system that is mobile and comprises a transportable platform. Andon only discloses a catalyst tank capable of **'receiving catalyst' from a transport vehicle**, such as a truck or train in direct contrast to disclosing a catalyst injection system that itself is mobile and comprises a transportable platform. (Col. 2 lines10)

Furthermore, the Office Action fails to demonstrate any suggestion or motivation to modify Andon's catalyst injection system to be mobile and or to comprise a transportable platform. Nor has the Office Action demonstrated a reasonable expectation of success. The Office Action merely alleged "it would have been obvious" to *modify* Andon without demonstrating why one of ordinary skill in the art would have allegedly been *motivated* to *modify* Andon to disclose a catalyst injection system that is mobile and comprises a transportable platform.

Thus, Applicant respectfully submits that the rejection is overcome and independent claims 1, 18, and 22 are not obvious. Applicant respectfully submits that as the current independent claims are allowable, the claims which depend from the independent claims are also allowable.

Nonobviousness over Erickson

The Office Action rejected Claims 7, 8, 10-12, 17, and 26-30 under 35 U.S.C. §103(a) as allegedly unpatentable over Erickson (U.S. 4,769,127). However, the Examiner *incorrectly* cites Erickson as allegedly disclosing "a mobile catalyst injection system comprising: a transportable platform (56), a catalyst reservoir coupled to the platform (400)..... and adapted to control the flow of catalyst through the outlet port, and a generator coupled to the platform (column 5, lines 62-68, and column 6, lines 1-2)." Erickson only discloses a catalyst bin or tank that is **transported or carried by a transport vehicle**, such as a train or monorail, and fails to disclose a catalyst injection system that itself is mobile and has a transportable platform, as *correctly* quoted below:

"Desirably, **an overhead monorail is provided to transport the fresh catalyst bins** from the staging area to a discharge area above the silos, as well as to transport the spent catalyst bins from the spent catalyst filling zone to the staging area. In the preferred form, the monorail equipment includes a single overhead rail or track and a trolley which rides upon the rail. A transport carrier is operatively connected to the trolley and is raised and lowered from the trolley by cables. The transport carrier has grab hooks for grasping the fresh and spent catalyst bins." (column 4, lines 20-22)

"The fresh catalyst bin is then lifted off the intelligence pad and raised to the underside of an overhead monorail 52 (FIG. 3) by the grab hooks 54 of a monorail transport carrier 56. The monorail transport carrier is operatively connected to the monorail trolley 58 by cables 60. The trolley and the grab hooks are operatively connected to the central processing unit and are remotely and automatically controlled. The trolley and grab hooks also have manual override safety controls." (column 6, lines 62-68) **Each fresh catalyst container is carried by the overhead monorail** from the staging area facility to a remote control, computerized lift elevator 62 (FIG. 3). (column 6, lines 3-4)

In this case, Applicant respectfully submits that independent claims 1, 18, 22, and the all the claims dependent thereon, are not obvious because the Office Action fails to demonstrate a catalyst injection system that is mobile and comprises a transportable platform. Erickson only discloses a catalyst bin or tank that is **transported or carried by a transport vehicle**, such as a monorail, in direct contrast to disclosing a catalyst injection system that itself is mobile and comprises a transportable platform.

Furthermore, the Office Action fails to demonstrate any suggestion or motivation to modify Erickson's catalyst injection system to be mobile and comprise a transportable platform. Nor has the Office Action demonstrated a reasonable expectation of success. The Office Action merely alleged "it would have been obvious" to *modify* Erickson without demonstrating why one of ordinary skill in the art would have allegedly been *motivated* to *modify* Erickson. In this case, the issue is not whether Erickson reference may merely be modified; but whether Erickson provides any suggestion or motivation to modify and a reasonable expectation of success to disclose a catalyst injection system that is mobile and comprises a transportable platform. As such, Erickson fails to teach all the claimed elements and do not establish a *prima facie* case of obviousness.

Thus, Applicant respectfully submits that the rejection is overcome and independent claims 1, 18, and 22 are not obvious. Applicant respectfully submits that as the current independent claims are allowable, the claims which depend from the independent claims are also allowable.

Nonobviousness over Erickson in view of Haugen

The Office Action rejected Claims 13-16, 31, 32, 34 and 35 under 35 U.S.C. 103(a) as allegedly unpatentable over Erickson in view of Haugen (US 2616591).

As discussed earlier, the Examiner *incorrectly* cites Erickson as disclosing mobile catalyst injection system comprising a transportable platform. Erickson only discloses a catalyst bin or tank that is **transported or carried by a transport vehicle**, such as a monorail, in direct contrast to disclosing a catalyst injection system that itself is mobile

and comprises a transportable platform. Haegan also fails to provide the missing suggestion or motivation to modify to provide a catalyst injection system that itself is mobile and comprises a transportable platform. Haugen teaches dispense mechanisms that rotate under a hopper. As such, the Erickson and Haugen references, either individually or combined, fail to teach all the claimed elements and do not establish a *prima facie* case of obviousness

Nonobviousness over Andon in view of Haugen

The Office Action rejected dependent Claims 19-21, 23-25 and 33 under 35 U.S.C. 103(a) as allegedly unpatentable over Andon (US 4082513) in view of Haugen (US 2616591).

Regarding claim 19, the Office Action erroneously and mistakenly alleges Andon discloses a mobile catalyst injection system comprising: a trailer (column 2, lines 11-12) a catalyst reservoir coupled to the trailer (10) and adapted to be coupled to a fluid catalyst cracking unit (14), a pressure control system coupled to the trailer and catalyst reservoir (column 2, lines 42-61), a generator coupled to the pressure control system (inherent disclosure, see discussion *supra* at paragraph 15), and a flow control device coupled to an outlet of the reservoir (15) and adapted to control the flow of catalyst through the outlet port.

Although the Office Action even admits that Andon does not disclose a plurality of compartments and a plenum disposed in the catalyst reservoir and coupling compartments, nonetheless, the Office Action alleges that "However, Haugen discloses a dispensing device comprising a plurality of compartments (12, 13) and a plenum (17) disposed in the device and coupling the compartments."

As discussed above, the Examiner *incorrectly* cites Andon as disclosing mobile catalyst injection system comprising a transportable platform. Andon expressly discloses a catalyst storage tank that is just capable of receiving catalyst from trucks or cars and fails to disclose a catalyst injection system that itself is mobile and comprises a transportable platform. Haegan also fails to provide the missing suggestion or motivation to modify to provide a catalyst injection system that itself is mobile and comprises a transportable platform. Haugen also fails to disclose plurality

of dispense mechanisms, wherein a respective one of each dispense mechanisms coupled to a respective compartment of a vessel. Haugen teaches dispense mechanisms that rotate under a hopper. As such, the references, either individually or combined, fail to teach all the claimed elements and do not establish a *prima facie* case of obviousness.

Specifically regarding dependent claims 15, 16, 20, 24 and 32, even though the **Examiner admits that Haugen does not contemplate the use of compartments of different sizes** (Office Action pages 10 and 12), the Examiner nonetheless alleged that, "where the *only difference* between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984)."

Claim 15, 16, 20, and 24 are dependent claims directed to mobile catalyst injection system with a plurality of compartments having adjustable volume or method of such (claim 32) in which the references either individually or combined, fail to disclose a catalyst injection system that itself is mobile and comprises a transportable platform. Furthermore, the references fail to disclose mobile catalyst injection system with a plurality of compartments having adjustable volume and fail to demonstrate any suggestion or motivation to modify Haugen to have at least two compartments having different sizes. Nor has the Office Action demonstrated a reasonable expectation of success. Furthermore, the Office Action is misquoting *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338. *Gardner* expressly distinguishes differences in *kind* from *quantity*:

"However, the differences were in *quantity*, not *kind*, and might or might not be beneficial depending upon how important problems such as weight, strength, dryness, edge flutters, and support of the web were to one." 725 F.2d 1338, 1349)

A mobile catalyst injection system with a plurality of compartments having adjustable volume is not a mere difference in size but a difference of 'kind.' Furthermore, *Gardner* expressly states that unpatentability, when prior art does not disclose a given claim dimension is **not self-evident**:

"We focus next on the differences between the claimed invention and the prior art. Again, we see no clear error in the trial court's finding that Vits discloses the invention of the claims in suit except for their dimensional limitations. TEC argues that these dimensional limitations are likewise met by Vits as well as by devices disclosed in other references, but points to no findings or evidence of record beyond the drawings in the references for support. **The truth of the proposition is not self-evident.** TEC's contentions in this regard are no more than unsupported argument of counsel, and for that reason **unpersuasive. Differences between the prior art and the claimed invention therefore remain in the dimensional limitations** recited in claim 1." (725 F.2d 1338, 1345)

The Office Action merely alleged "it would have been obvious" to *modify* the references, without demonstrating why one of ordinary skill in the art would have allegedly been *motivated to modify* the references to have a mobile catalyst injection system with a plurality of compartments having adjustable volume and also does not demonstrate any reasonable expectation of success.

Consequently, in this case, Applicant respectfully submits that independents and the all the claims dependent thereon, are not obvious because the Office Action fails to demonstrate a motivation to modify to have a mobile catalyst injection system with a plurality of compartments having adjustable volume. Thus, Applicant respectfully submits that the rejection is overcome and independent claims are not obvious. As current independent claims are allowable, the claims which depend from the independent claims are also allowable.

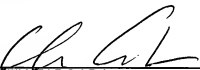
CONCLUSION

Applicant respectfully requests an Examiner interview and or submits that the present amendment places the application in condition for allowance. Thus, the Applicant submits that all claims now pending are in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issuance are earnestly solicited.

If, however, the Examiner believes that any unresolved issues still exist, it is requested that the Examiner telephone Mr. Keith Taboada at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

Mar 23, 2007



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